



Agenda Date: 5/5/05
Agenda Item: 6A

STATE OF NEW JERSEY
Board of Public Utilities
Two Gateway Center
Newark, NJ 07102
www.bpu.state.nj.us

RELIABILITY & SECURITY

IN THE MATTER OF THE PETITION AND)	<u>DECISION AND ORDER</u>
REPORT OF NEW JERSEY NATURAL GAS)	
COMPANY FOR AUTHORIZATION AND)	
APPROVAL OF THE INSTALLATION OF A)	
TRANSMISSION PIPELINE PURSUANT TO)	
<u>N.J.A.C. 14:7-1.4</u>)	DOCKET NO. GE04060433

(SERVICE LIST ATTACHED)

BY THE BOARD:

On June 9, 2004, New Jersey Natural Gas Company ("Petitioner" or "NJNG") filed a petition with the New Jersey Board of Public Utilities ("Board"), pursuant to N.J.A.C. 14:7-1.4, for authorization to relocate, replace and increase the size of approximately 5,200 feet of an existing 16-inch transmission pipeline with a maximum allowable operating pressure ("MAOP") of 722 psig in Toms River (Dover Township) and the Borough of South Toms River, New Jersey ("Proposed Pipeline"). In addition, NJNG requested that the Board grant such authorization on an expedited basis pursuant to N.J.A.C. 1:1-12.6. On November 5, 2004, NJNG filed an amended petition, which reflected a change in route and a change in length from approximately 5,200 feet to approximately 5,300 feet.

According to NJNG, the existing pipeline, which is a portion of the Oyster Creek Line, is being replaced as a result of construction conflicts with a proposed bridge across the Toms River being constructed by the County of Ocean, as well as part of a systematic maintenance program for the line. The pipeline size is being increased from 16-inches to 20-inches to accommodate anticipated future usage demands. Segments of the existing 16-inch portion of the Ocean Creek Line will be retained and downgraded to distribution pressure. The portion of the Oyster Creek Line in Toms River (Dover Township) runs from the Toms River Station, down Herflicker Boulevard, across Irons Street into a Company easement, and then across the Toms River into the Borough of South Toms River. From this point, the Oyster Creek Line crosses

South Main Street and continues down Flint Road to the Borough of Beachwood municipal boundary where it is tied into the existing Oyster Creek Line. The purpose of the Oyster Creek Line is to maintain existing gas deliverability to Petitioner's service territory in southern Ocean County, as well as the Oyster Creek Generating Station. The existing section of the Oyster Creek Line was constructed in 1974 and 1978. It is approximately 10.85 miles in length and has a MAOP of 575 psig. This part of the Oyster Creek Line starts at the Toms River Station located on Herflicker Boulevard near the intersection of Highland Parkway in Toms River (Dover Township) and ends in Forked River (Lacey Township) at the Oyster Creek Station located on State Highway Route 9. The Oyster Creek Line is fed by the Jamesburg Line through the Toms River Station that is capable of transporting natural gas supplied mainly from Texas Eastern Transmission Corporation.

The Proposed Pipeline will have the same MAOP as the existing pipeline that it is being tied into – 722 psig.¹ The new remote controlled valve at the Toms River Station can be used to isolate the Oyster Creek Line in the event of an emergency. Upon completion of this project, the Oyster Creek Line will be one continuous 20-inch line, therefore accommodating the future use of in-line inspection ("ILI") devices. Furthermore, Petitioner will be able to operate this section of the Oyster Creek Line at the same MAOP as the existing 20-inch portion, therefore enabling the Petitioner to have one continuous MAOP from the Jamesburg Station to the Oyster Creek Station.

N.J.A.C. 14:7-1.4 provides, in pertinent part:

Gas pipelines which are to be operated at a maximum pressure in excess of 250 psig shall not be installed within 100 feet of any building intended for human occupancy . . . unless such installation is authorized and approved by the Board.

Currently, there are forty-four (44) structures intended for human occupancy (both residential and commercial) within 100 feet of the centerline of the existing 16-inch transmission line along Herflicker Boulevard and Irons Street in Toms River (Dover Township), and Flint Road in the Borough of South Toms River. As a result of the proposed project, only ten (10) of the original forty-four (44) structures intended for human occupancy would be within 100 feet of the centerline of the project. In addition, there are seventeen (17) additional structures intended for human occupancy within 100 feet of the centerline of the project. All twenty-seven (27) structures on fifteen (15) properties are commercial buildings. NJNG has notified all twenty-seven (27) commercial property owners of the construction of the Proposed Pipeline. In addition, a public hearing was held at 7:00 PM on Wednesday, January 26, 2005, in South Toms River. No member of the public attended.

The alternate route considered for the Proposed Pipeline was to install the Proposed Pipeline southeasterly along Herflicker Boulevard to Irons Street, then south on Irons Street to an easement running southeasterly across the Toms River to south Main Street, and from that point southeasterly along Flint Road to the same tie-in location as the selected route. The alternate route would require the installation of the Proposed Pipeline paralleling the existing pipeline, as well as traffic interference of a thoroughfare that is already congested. Numerous

¹The existing 20-inch Oyster Creek Line was authorized to be constructed under BPU Docket No. GE89030317 on July 5, 1989 and is qualified to operate at a MAOP of 722 psig.

other underground utility lines also occupy Herflicker Boulevard and Irons Street. Installation of the Proposed Pipeline within the roadway at these locations would require the crossing and possible relocation of these other underground utilities. This would result in a significant increase in construction time, which would increase the period of time that traffic would be disrupted and the residents would be inconvenienced. In addition, the alternate route would pass closer to residential neighborhoods than the proposed route. The alternate route would parallel the existing 16-inch transmission line that is to be downgraded to distribution pressure and result in forty-four (44) structures intended for human occupancy (both residential and commercial) to be within 100 feet of the centerline of the Proposed Pipeline. The proposed route would result in twenty-seven (27) structures intended for human occupancy (commercial) to be within 100 feet of the centerline of the proposed pipeline. Therefore, the proposed route is the most direct and least problematic, will impact less structures, and will be located further away from residential neighborhoods. Furthermore, the County of Ocean also plans to reconstruct Flint Road in the Spring of 2005 and also has future plans to reconstruct Herflicker Boulevard, which may result in significant impacts to the existing 16-inch transmission main. By relocating the Proposed Pipeline to the selected proposed route, those impacts will be avoided.

The Proposed Pipeline will be constructed of 20-inch outside diameter pipe with a 0.375-inch wall thickness to replace the existing pipeline. The Proposed Pipeline will be manufactured in accordance with the applicable American Petroleum Institute ("API") Standard 5LX with specified minimum yield strength of 60,000 psi and minimum tensile strength of 75,000 psi. The Proposed Pipeline will be constructed in accordance with N.J.A.C. 14:7 and the Federal Regulations for the Transportation of Natural and Other Gas By Pipeline, Part 192, Title 49 of the Code of Federal Regulation. The Proposed Pipeline is designed for Class 4 Locations. The Proposed Pipeline will be designed and constructed to accommodate future ILI devices, and the Proposed Pipeline will be subjected to 100% non-destructive testing on all welds and be subjected to at least 2,025 psig of hydrostatic test pressures, which will produce 90% of its Specified Minimum Yield Strength.

The Bureau of Pipeline Safety of the Board's Division of Reliability and Security has reviewed the petition and record in this matter and recommends approval of the relief requested.

After review of the entire record in this matter, the Board HEREBY FINDS that:

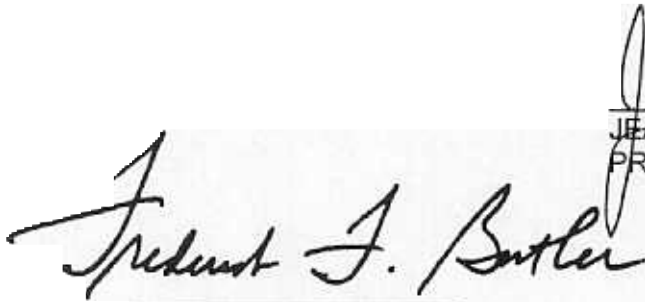
- 1 The relocation, replacement and construction of the Proposed Pipeline is necessary and is in the public interest;
- 2 The Board is satisfied that the proposed relocation, replacement and construction cannot be reasonably avoided;
3. The Board has received no objection from persons whose residences and business establishments are located within 100 feet of the Proposed Pipeline; and
4. The standards that Petitioner will use in the design, construction and testing of the Proposed Pipeline will comply with all applicable State and Federal Codes, and inspections of the pipelines will be performed by personnel of the Board's Bureau of Pipeline Safety.

Therefore, based upon the foregoing, the Board HEREBY APPROVES and AUTHORIZES, on an expedited basis, the relocation, replacement and construction of approximately 5,300 feet of 20-inch transmission pipeline with a maximum allowable operating pressure of 722 psig in Toms River (Dover Township) and the Borough of South Toms River, New Jersey as requested by NJNG.

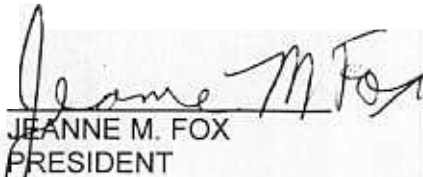
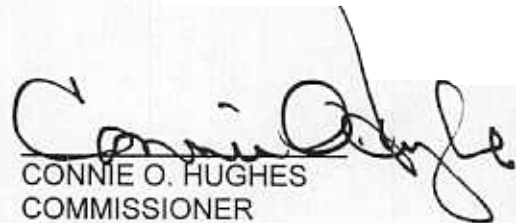
DATED:

May 5, 2005

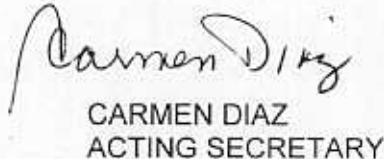
BOARD OF PUBLIC UTILITIES
BY:



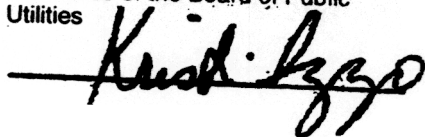
FREDERICK F. BUTLER
COMMISSIONER


JEANNE M. FOX
PRESIDENT
CONNIE O. HUGHES
COMMISSIONER
JACK ALTER
COMMISSIONER

ATTEST:


CARMEN DIAZ
ACTING SECRETARY

I HEREBY CERTIFY that the within
document is a true copy of the original
in the files of the Board of Public
Utilities



**I/M/O the Petition and Report of New Jersey Natural Gas Company
BPU DOCKET NO. GE04060433**

SERVICE LIST

Jacqueline Hardy, Esq.
New Jersey Natural Gas Company
1415 Wyckoff Road
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Wall, New Jersey 07719

David McMillan, Chief
John Grillo, Principal Engineer
Bureau of Pipeline Safety
Division of Reliability and Security
Board of Public Utilities
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November 5, 2004

1415 Wyckoff Road
P.O. Box 1468
Wall, NJ 07719
Phone: 732-938-1000

By Federal Express

Kristi Izzo, Secretary
State of New Jersey
Board of Public Utilities
Two Gateway Center
Newark, New Jersey 07102

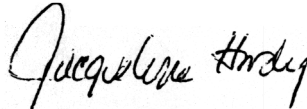
**Re: In the Matter of the Amended Petition and Report of New Jersey
Natural Gas Company for Authorization and Approval of the
Installation of a Transmission Pipeline Pursuant to N.J.A.C. 14:76.4
et seq., BPU Docket No. GE03070515**

Dear Secretary Izzo:

Enclosed for filing with the Board is an original and ten (10) copies of
Amended Petition of New Jersey Natural Gas Company in the above referenced matter.

Kindly acknowledge receipt of this filing by date stamping the enclosed copy of
this letter and returning same in the enclosed self-addressed stamped envelope.

Very truly yours,



Jacqueline Hardy, Esq.
Attorney for
New Jersey Natural Gas Company

c: James Giuliano, Director
David MacMillan, Bureau Chief

**IN THE MATTER OF THE PETITION AND REPORT OF THE
NEW JERSEY NATURAL GAS COMPANY FOR AUTHORIZATION AND
APPROVAL OF THE INSTALLATION OF A TRANSMISSION PIPELINE
PURSUANT TO N.J.A.C. 14:7-1.4 et. seq.
BPU DOCKET NO. GE03070515**

SERVICE LIST

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N.J. Board of Public Utilities

Kristi Izzo, Secretary
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07/09/04

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

In the Matter of Amended Petition and)
Report of New Jersey Natural)
Gas Company for Authorization)
and Approval of Construction of)
Proposed Pipelines Pursuant to)
N. J. A. C. 14:7-1.4 et. seq.)

AMENDED
PETITION AND REPORT

Docket No. GE03070515-

RECEIVED
JAN 10
2004 NOV - 8 PM 3:04

**TO THE HONORABLE COMMISSIONERS
OF THE BOARD OF PUBLIC UTILITIES:**

By this Amended Petition, New Jersey Natural Gas Company ("Petitioner" or "New Jersey Natural") hereby requests that the New Jersey Board of Public Utilities ("Board"), pursuant to *N.J.A.C. 14:7-1.4*, (a) grant approval to construct 5,300 feet of 20-inch transmission pipeline with a maximum allowable operating pressure ("MAOP") of 722 psig in Toms River, New Jersey ("Proposed Pipeline"); and (b) grant such approval on an expedited basis pursuant to *N.J.A.C. 1:1-12.6*. In support of its Amended Petition, New Jersey Natural states the following:

(1) Petitioner is a corporation duly organized under the laws of the State of New Jersey. It is a public utility engaged in the business of purchasing, distributing, transporting and selling natural gas to approximately 450,000 customers within its service areas in Monmouth and Ocean counties, and parts of Morris and Middlesex counties.

(2) Communications and correspondence relating to the proceeding herein should be sent as follows:

Gary Edinger
Senior Vice President
New Jersey Natural Gas Company
1415 Wyckoff Road
P.O. Box 1464
Wall, New Jersey 07719

Tracey Thayer, Director
New Jersey Natural Gas Company
1415 Wyckoff Road
P.O. Box 1464
Wall, New Jersey 07719

-and-

Jacqueline Hardy, Esq.
Attorney for New Jersey Natural Gas Company
NJR Service Corporation
1415 Wyckoff Road
P.O. Box 1464
Wall, New Jersey 07719

(3) In support of New Jersey Natural's Amended Petition, attached are the following exhibits:

- a) Exhibit "1" – System Improvement, Oyster Creek Line; Rt. 166 Section; Dover Twp./S. Toms River Borough, Ocean County, New Jersey
- b) Exhibit "2" - Structures within 100' of Proposed 20" Gas Transmission Main
- c) Exhibit "3" – Pipeline Engineering Data Sheet

I. REQUEST FOR APPROVAL OF CONSTRUCTION

(4) Petitioner plans to relocate, replace, and increase the size of the 16-inch portion of its Oyster Creek transmission pipeline (the "Oyster Creek Line") from its current location. This portion of the Oyster Creek Line in Toms River (Dover Township) runs from the Toms River Station, down Herflicker Boulevard, across Irons Street into a New Jersey Natural Gas Company easement, and then across the Toms River into the Borough of South Toms River. From this point, the Oyster Creek Line crosses South Main Street and continues down Flint Road to the Borough of Beachwood municipal boundary where it is tied into the 20-inch portion of the Oyster Creek Line. This portion of the Ocean Creek Line is being replaced as a result of construction conflicts with the proposed bridge across the Toms River being constructed by the County of Ocean, as well as part of a systematic maintenance program for the line. The pipeline

size is being increased to accommodate anticipated future usage demands. Portions of the existing 16-inch portion of the Ocean Creek Line will be retained and downgraded to distribution pressure.

(5) The purpose of the Oyster Creek Line is to maintain existing gas deliverability to Petitioner's service territory in southern Ocean County, as well as the Oyster Creek Generating Station. The Proposed Pipeline route will generally run from a point east of Highland Parkway South ("Toms River Station") in a southerly direction for approximately 350 feet across the "Toms River Station" to a point 75 feet east of the east curb line of Highland Parkway South. At this point, the Proposed Pipeline will enter into a thirty-five foot wide permanent easement through Block 566.04, Lot 1 and Block 569, Lot 11, granted to the Petitioner by Consolidated Rail Corporation on June 24, 1991 (as recorded in the Ocean County Clerk's office on July 9, 1991, Deed Book 4916, page 157). From this point, the Proposed Pipeline will continue southeasterly within the easement for approximately 1,200 feet at which point it will cross Irons Street and continue southeasterly in said easement for an additional 370 feet. The Proposed Pipeline will then enter a variable width utility easement granted to Petitioner by the County of Ocean and continue across the Toms River and under South Main Street into the Borough of South Toms River through said utility easement for a distance of approximately 845 feet. From this point, the Proposed Pipeline will continue approximately 2,500 feet southeasterly along State Highway Route 166 (a.k.a. "Atlantic City Boulevard") within a ten foot wide permanent easement and right-of-way through Block 23, Lot 1, granted to Petitioner by Mall Enterprises on July 13, 1989 (as recorded in the Ocean County Clerk's office on July 14, 1989, Deed Book 4770, page 453), to a point approximately 160 feet northwest of the intersection of Flint Road and Admiral Avenue where it will tie into the existing Oyster Creek Line. The total length of the

project approximately 300 linear feet. The scope of the project depicted Exhibit ("System Improvement, System Improvement, Oyster Creek Line; R 66 Section; Do Twp./S. Toms River Borough, Ocean County, New Jersey") to this Amended Petition.

6) The existing section of the Oyster Creek Line constructed in 1974 and 1975. It is approximately 8.5 miles in length and has a MAOP of 250 psig. The Oyster Creek Line starts at the Toms River Station located on Herflicker Boulevard at the intersection of Highland Parkway in Toms River (Dover Township) and ends in Forked River (Lacey Township) at the Oyster Creek Station located on State Highway Route 1. The Oyster Creek Line is fed by the Jamesburg Line through the Toms River Station that is capable of transporting natural gas supplied from the New York Eastern Transmission Corporation.

(7) N.J.A.C. 4-7-4 requires the prior authorization and approval of the Board for the construction of any natural gas pipeline to be operated in excess of 250 psig, which is to be located within 100 feet of any building intended for human occupancy. Currently, there are forty-four (44) structures intended for human occupancy (both residential and commercial) within 100 feet of the centerline of the existing 6-inch transmission line along Herflicker Boulevard and Irons Street in Dover Township, and Flint Road in the Borough of South Toms River. As a result of the proposed project, only ten (10) of the original thirty-three (33) structures intended for human occupancy would be within 100 feet of the centerline of the Project. In addition, there are seventeen (17) additional structures intended for human occupancy within 100 feet of the centerline of the Project. All twenty-seven (27) structures (fifteen (15) properties, commercial buildings and shown on Exhibit ("Structures within 100 feet of Proposed 20" Gas Transmission Main") attached to this Amended Petition. Exhibit shows the block and lot numbers, the names and addresses of the owners, and the distance of the structures from the

centerline of the Proposed Pipeline. New Jersey Natural has notified all twenty-seven (27) commercial property owners of the construction of the Proposed Pipeline.

(8) The Proposed Pipeline will have the same MAOP as the existing pipeline that it is being tied-into – 722 psig.¹ An existing remote controlled valve (“RCV”) at the Toms River Station can be used to isolate the Oyster Creek Line in the event of an emergency. Upon completion of this project, the Oyster Creek Line will be one continuous 20-inch line therefore accommodating the future use of in-line inspection (“ILI”) devices. Furthermore, Petitioner will be able to operate this section of the Oyster Creek Line at the same MAOP as the existing 20-inch portion therefore enabling the Petitioner to have one continuous MAOP from the Jamesburg Station to the Oyster Creek Station.

(9) The Proposed Pipeline will be constructed of 20-inch outside diameter pipe with a 0.375-inch wall thickness to replace the existing pipeline. The Proposed Pipeline will be manufactured in accordance with the applicable American Petroleum Institute (“API”) Standard 5LX with specified minimum yield strength of 60,000 psi and minimum tensile strength of 75,000 psi. The Proposed Pipeline will be constructed in accordance with N.J.A.C. 14:7 and the *Federal Regulations for the Transportation of Natural and Other Gas By Pipeline, Part 192, Title 49 of the Code of Federal Regulation*. The Proposed Pipeline is designed for Class 4 Location. The Proposed Pipeline will be designed and constructed to accommodate future in-line inspection (“ILI”) devices. The Proposed Pipeline will be subjected to 100% non-destructive testing on all welds and be subjected to at least 2,025 psig of hydrostatic test pressures, which will produce 90% of its Specified Minimum Yield Strength. A copy of the engineering data is attached as Exhibit 3

¹ The existing 20-inch Oyster Creek Line was authorized to be constructed under BPU Docket No. GE89030317 on July 5, 1989 and is qualified to operate at a MAOP of 722 psig.

("Pipeline Engineering Data Sheet") to this Amended Petition.

(10) The alternate route considered for the Proposed Pipeline was to install the Proposed Pipeline southeasterly along Herflicker Boulevard to Irons Street, then south on Irons Street to an easement running southeasterly across the Toms River to south Main Street, and from that point southeasterly along Flint Road to the same tie-in location as the selected route. The alternate route, depicted on Exhibit 1, would require the installation of the Proposed Pipeline paralleling the existing pipeline, as well as traffic interference of a thoroughfare that is already congested. Numerous other underground utility lines also occupy Herflicker Boulevard and Irons Street. Installation of the Proposed Pipeline within the roadway at these locations would require the crossing and possible relocation of these other underground utilities. This would result in a significant increase in construction time, which would increase the period of time that traffic would be disrupted and the residents would be inconvenienced. In addition, the alternate route would pass closer to residential neighborhoods than the proposed route. The alternate route would parallel the existing 16-inch transmission line that is to be downgraded to distribution pressure and result in forty-four (44) structures intended for human occupancy (both residential and commercial) to be within 100 feet of the centerline of the Proposed Pipeline. The proposed route would result in twenty-seven (27) structures intended for human occupancy (commercial) to be within 100 feet of the centerline of the proposed pipeline. Therefore, the proposed route is the most direct and least problematic, will impact less structures, and will be located further away from residential neighborhoods. Furthermore, the County of Ocean also plans to reconstruct Flint Road in the Spring of 2005 and also has future plans to reconstruct Herflicker Boulevard, which may result in significant impacts to the existing 16-inch transmission main. By relocating the Proposed Pipeline to the selected proposed route, those impacts will be avoided.

II. REQUEST FOR EXPEDITED RELIEF

(11) New Jersey Natural requests that the Board approve the instant Amended Petition on an expedited basis pursuant to *N.J.A.C.* 1:1-12.6. New Jersey Natural must complete construction of the Proposed Pipeline before the County of Ocean County can begin construction of the Toms River Bridge. To facilitate the County's construction project, New Jersey Natural plans to begin construction of the Proposed Pipeline as soon as the Board grants approval thereof.

WHEREFORE, New Jersey Natural Gas Company respectfully requests that the Board approve

its request to construct 5300 feet of 20-inch transmission pipeline with a MAOP of 722 psig in Dover Township, Borough of South Toms River and Toms River, New Jersey as previously described; and

its request for approval of such construction on an expedited basis to permit New Jersey Natural to start construction as soon as possible; and

(3) any other relief deemed just and equitable.

Respectfully submitted,

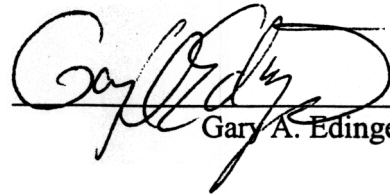


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(732) 938-1248
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Date: November 5, 2004

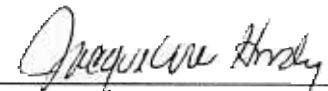
STATE OF NEW JERSEY)
COUNTY OF MONMOUTH)

Gary A. Edinger, being duly sworn, deposes and says that he is the Senior Vice President of Energy Delivery for Petitioner; that he has read the foregoing Amended Petition, and that the contents thereof are true to the best of his knowledge, information, and belief.



Gary A. Edinger

Sworn and subscribed to before me
This 5th day of November, 2004

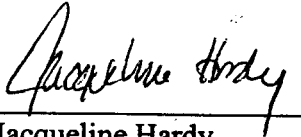


Jacqueline Hardy, Esq.
Attorney at Law in the State of New Jersey

CERTIFICATE OF MAILING

I hereby certify that on this date copies of the within Amended Petition were served by either hand delivery or ordinary mail upon

Seema Singh, Director
Division of Ratepayer Advocate
31 Clinton Street
Newark, New Jersey 07102



Jacqueline Hardy

Dated: November 5, 2004

EXHIBIT 3

New Jersey Natural Gas Company

PIPELINE ENGINEERING DATA SHEET

Project Name: Oyster Creek Line, Rt. 166 Section
 Location: Dover Township, Borough of South Toms River
 Work Order #: 6190/6290-7566

Calculations by: M. Kurilla Date: 13-May-04

Pipe material: Steel, API-5L-X60 Type of fittings: Y60
 Pipe length: 1.00 Mile(s) Type of flanges: ANSI 600
 Pipe coating: Pritec / FBE & Powercrete Type of valves: ANSI 600

Design code: API-5L

SMYS : specified minimum yield strength = 60,000 psi
 OD : outside diameter of pipe = 20.000 in.
 t : wall thickness of pipe = 0.375 in.
 F : design factor (type D, class 4 location) = 0.400
 E : longitudinal joint factor (ERW) = 1.000
 T : temperature derating factor (< 250 deg. F) = 1.000
 MAOP : maximum allowable operating pressure = 900 psig
 MOP : maximum operating pressure = 722 psig

Inside diameter of pipe: = 19.250 in.

Design pressure: $P = [2 (SMYS) \times t \times F \times E \times T] / (OD)$ = 900 psi

Hoop stress at MOP: $SMOP = (MOP \times OD) / (2t)$ = 19,253 psi

Hoop stress at MOP as a % of SMYS: $(SMOP \times 100) / (SMYS)$ = 32.09 %

Hoop stress at MAOP: $SMAOP = (MAOP \times OD) / (2t)$ = 24,000 psi

Hoop stress at MAOP as a % of SMYS: $(SMAOP \times 100) / SMYS$ = 40.00 %

Test pressure $[2 (SMYS) \times t \times 0.9] / OD$ = 2025 psig
 90% of SMYS